# WASHINGTON STATE COLLABORATIVE



# DIABETES AND ADULT PREVENTIVE SERVICES

Handbook • September 2002







# **Acknowledgements**

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## **About This Handbook**

The purpose of this handbook is to provide you with background and reference information on the Collaborative and to help you prepare for a successful start to this exciting year of quality improvement.

**Getting Started** contains an overview of the Collaborative, a schedule of major events and periods, and a checklist of pre-work activities—tasks your team should accomplish before the first learning session on November 4–5, 2002.

The section on **Completing Pre-work** will walk your team step-by-step through preparing for the first learning session.

The **Collaborative Charter** contains the mission and rationale for this Collaborative along with a description of the methods that will be used and lists of Collaborative expectations—what your team can expect from the Collaborative and what the Collaborative expects from your team.

The **Measurement Strategy** section describes the data that your team will collect to monitor your progress during the Collaborative.

The **Change Package** contains a variety of ideas for improving diabetes management and adult preventive care. You will refer to it throughout the Collaborative.

A Glossary of Terms and Concepts and a list of Collaborative Leadership and Faculty will also serve as references throughout the Collaborative.

In addition, please find a detailed **Calendar of Events** included with this handbook.

## **Getting Started**

Thank you for participating in the Washington State Collaborative! This section provides you with an overview of the Collaborative, a schedule of activities, and a list of pre-work activities—tasks for you to accomplish before the first learning session.

## **Overview**

A Collaborative is a systematic approach to healthcare quality improvement in which organizations and providers test and measure practice innovations, then share their experiences in an effort to accelerate learning and widespread implementation of best practices.

## **History of Collaboratives**

In 1995, the Institute for Healthcare Improvement (IHI) held the first Breakthrough Series, or Collaborative, and since then, more than 700 teams from over 450 United States and Canadian healthcare organizations have participated in such Collaboratives. IHI has conducted 26 Collaboratives and has begun training other organizations to facilitate Collaboratives modeled after their Breakthrough Series.

#### This Collaborative

The Washington State Collaborative: Diabetes and Adult Preventive Services will involve healthcare teams from organizations across the state working together for 13 months to individually test changes to their practice and to collectively share learning. Previous Collaboratives in Washington State and elsewhere have focused on diabetes alone; however, this Collaborative will be the first to also address adult preventive care.

## **Collaborative Events and Working Times**

Four components of the Collaborative are pre-work activities, learning sessions, action periods, and the outcomes congress. **Pre-work** is the period between receipt of this handbook and Learning Session 1, November 4–5, 2002. During this time, your team has several important tasks to accomplish. These tasks are listed later in this section and described in detail in the following section.

**Learning sessions** are the major interactive events of the Collaborative. Through plenary sessions, small-group discussions, and team meetings, attendees have the opportunity to

- learn from faculty and colleagues,
- receive individual coaching,
- gather knowledge on diabetes, preventive health, and process improvement,
- share experiences and collaborate on improvement plans, and

• problem-solve barriers to improving care.

Action periods are the time between learning sessions. During action periods, your team will work within your organization to test and implement changes aimed at either improving care for people with diabetes or improving preventive care for adults. Teams will share the results of their improvement efforts in brief monthly reports and also participate in shared learning through an electronic mailing list (e-mail list), monthly conference calls, and a Web site (we strongly urge participants who do not have access to e-mail to subscribe to an internet service provider for the duration of the Collaborative). Participation in action periods is not limited to those who attend learning sessions; we encourage and expect the participation of other team members within your organization.

An **outcomes congress** where teams will publicly share their findings and celebrate their achievements will take place November 3–4, 2003.

## **Schedule**

The sequence of events for the Collaborative is as follows:

Preparation, or Pre-Work September–October 2002

Learning Session 1 November 4–5, 2002

Action Period 1 November 2002–February 2003

Learning Session 2 February 3–4, 2003

Action Period 2 February–May 2003

Learning Session 3 May 5–6, 2003

Action Period 3 May–November 2003

Outcomes Congress November 3–4, 2003

Please also see the **calendar of events**. It provides a more detailed schedule which includes conference calls and due dates for senior leader reports, monthly reports your team will submit to a senior leader in your organization and to the e-mail list your team will join as part of the Collaborative.

## **Checklist of Pre-work Activities**

To prepare for Learning Session 1, each organization needs to complete the following pre-work activities:

- □ 1. Read the Collaborative charter.
- □ 2. Form a team.
- □ 3. Sign a Memorandum of Understanding with Qualis Health.
- □ 4. Schedule a conference call with your team and the Collaborative leadership.
- □ 5. Join the e-mail list.
- □ 6. Register and arrange for any necessary travel for Learning Session 1.
- □ 7. Develop an aim statement.
- 8. Define a pilot population.
- □ 9. Select measures.
- □ 10. Select and begin to populate a registry.
- □ 11. Prepare a storyboard for Learning Session 1.
- □ 12. Select a health plan to partner with (optional).
- □ 13. Complete a Memorandum of Understanding with your health plan partner (optional).

The next section of this handbook contains instructions for completing pre-work activities.

# Instructions for Completing Pre-work Activities

The following pages provide information about how to complete each pre-work activity. A worksheet to help you complete pre-work activities follows.

## 1. Collaborative Charter

Please read the Collaborative charter, which is the next section of this handbook. The charter defines the Collaborative mission, summarizes the evidence that will direct your work, outlines methods that your team will use to achieve the mission, and lists what teams can expect from the Collaborative Leadership as well as what the leadership expects of teams.

## 2. Forming a Team

Having an appropriate and effective team is a key component of successful improvement efforts. Choose your team members based on their knowledge of, involvement in, and enthusiasm for the systems and processes that you will work to improve.

In forming your team, you will need to fill four leadership roles: senior leader, system leader, clinical champion, and day-to-day leader. The senior leader should plan to attend at least the first and third learning sessions and the outcomes congress. The system leader, clinical champion, and day-to-leader should plan to attend all three learning sessions and the outcomes congress. There may be one or more individuals who qualify for a given role. Also, one individual may fill more than one role. In any case, having each role filled is essential for success.

## Senior Leader

The ideal senior leader

- has ultimate authority to allocate time and resources needed to achieve the team's aim,
- has administrative authority over all areas affected by changes the team will test, and
- will champion the spread of successful changes throughout the organization.

The senior leader is generally an executive in the organization. He or she is encouraged to attend all learning sessions and the outcomes congress and is expected to at least attend at least the first and third learning sessions and the outcomes congress.

## System Leader

The ideal system leader

- has direct authority to allocate the time and resources needed to achieve the team's aim,
- has direct authority over the particular systems affected by changes the team will test, and
- will champion the spread of successful changes throughout the department or service area

An example of a system leader would be a medical director or clinical director. The system leader attends all learning sessions and the outcomes congress.

Note: in small clinics, the senior leader and system leader roles may be filled by one person. Similarly, the clinical champion (see below) may also fill the role of system leader, senior leader, or both.

## **Clinical Champion**

The ideal clinical champion

- is a practicing provider who is an opinion leader and is respected by peers,
- knows the subject matter intimately and understands the processes of care,
- has a good working relationship with colleagues and the day-to-day leader, and
- wants to drive improvements in the system.

It is essential to have a clinical champion—usually a physician but, in some cases, a nurse practitioner, physician assistant, or other healthcare provider—on the team. The clinical champion attends all three learning sessions and the outcomes congress.

## Day-to-Day Leader

The ideal day-to-day leader

- drives the project, ensuring that cycles of change are tested, implemented, and documented:
- coordinates communication between the team and the Collaborative;
- oversees data collection; and
- works effectively with the clinical champion.

The day-to-day leader is often a quality improvement manager, nurse, or diabetes educator. He or she should understand how changes will affect systems and have the time to keep the project moving forward. The day-to-day leader attends all three learning sessions and the outcomes congress.

### Other Team Members

In addition to the four core team members listed above, teams will include other members from the organization who are involved in testing and implementing changes but may learn about the Collaborative from the core team members, although they are always welcome to attend the learning sessions and the outcomes congress. Three to six members is a good size for a team.

## 3. Completing a Memorandum of Understanding

The purpose of the Memorandum of Understanding (MOU) is to specify the responsibilities of participating teams and Collaborative sponsors. The MOU is signed by the person in your organization with contract-signing authority. Please work with Collaborative co-director Janelle Jacobs, RN, BSN, Qualis Health, to complete an MOU: **206.364.9700**, ext. **2114**; janellej@qualishealth.org.

## 4. Scheduling a Conference Call

Each team needs to schedule a conference call with the Collaborative leadership before the first learning session. A member of the leadership team will assist your team in its preparation and assess its readiness to participate in the Collaborative. Before the call, your team should have started pre-work activities.

To schedule the conference call, please contact Collaborative coordinator Melissa Merculief, RHIA, at Qualis Health: **206.364.9700**, **ext. 2270**; **melissam@qualishealth.org**.

## 5. Joining the E-mail List

At least one member from each team must join the electronic mailing list, or e-mail list, for the Collaborative and take responsibility for distributing information to the rest of the team; however, we encourage all team members to join the list. The Collaborative leadership and team members will use the list to distribute information and tools, ask questions and receive replies, and conduct ongoing discussions of changes tested, barriers encountered, and lessons learned.

To sign up for the e-mail list, please contact Collaborative coordinator Melissa Merculief, RHIA, at Qualis Health: **206.364.9700**, ext. **2270**; melissam@qualishealth.org.

In addition, you might want to explore the Web site for the Collaborative: www.doh.wa.gov/cfh/wsc.

## 6. Making Arrangements for Learning Session 1

Core team members represent the team at the learning sessions and the outcomes congress, and they share their learning with other members of the team. The senior leader

typically plans to attend the first and third learning sessions and the outcomes congress. The system leader, the clinical champion, and the day-to-day leader are expected to attend all learning sessions and the outcomes congress.

## Registering

Registration is available on-line via the Qualis Health Web site: **www.qualishealth.org/events.htm**.

You must register for each session of the Collaborative separately. The cost of each learning session is \$200.00 per team member, plus any travel expenses.

## **Arranging for lodging**

Meetings for the Collaborative will be held at the DoubleTree Hotel Seattle Airport in Seattle, Washington. To arrange for lodging, call the hotel directly at **206.246.8600** or 800.222.TREE.

To receive a group rate, you must (1) make your room reservations by **October 11, 2002**, and (2) identify yourself as an attendee of the Washington State Collaborative.

## 7. Developing an Aim Statement

An aim statement is a concise, written statement describing what the team expects to accomplish in the Collaborative; it provides guidance for the team's specific improvement efforts. The aim statement ensures that team activities align with the strategic goals of the team's organization. Involving senior leadership in developing an aim statement can help teams ensure support for their work.

## Example, diabetes track:

Neighborhood Health Clinic will re-design office practices by implementing the Chronic Care Model so that 60% of the patients with diabetes will have an HbA1c less than 8.0%, over 70% will have their most recent blood pressure below 140/90 mm Hg, 70% will have an LDL cholesterol less than 130 mg/dl, 80% will have a documented self-management goal, and 80% of tobacco users will be offered cessation counseling.

## Example, adult preventive services track:

Welcome Family Practice will re-design office practices by implementing the Chronic Care Model so that over 75% of our patients 65 and older have a documented pneumococcal vaccination; 80% of patients 40 and older who are women have had a mammogram, 80% of patients 40 and older who are tobacco users have been offered tobacco-cessation counseling, and 65% of patients 40 and older have a documented self-management goal.

In setting your aim, be sure to

**Involve senior leaders**. Senior leaders must align the aim with strategic goals of the organization. They must also provide support personnel and resources from departments such as information systems, finance and reimbursement, and medical affairs.

**Base your aim on data or organizational needs**. Examine data within your organization. Refer to the Collaborative charter and focus on issues that matter at your clinic.

**State the aim clearly and use numerical goals**. Teams make better progress when they have a specific aim. Setting numerical targets clarifies the aim, helps create tension for change, and directs measurement. For example, an aim to "increase the percentage of patients with self-management goals to 50%" will be more effective than an aim to "improve patient self-management practices."

There will be time during the first learning session to refine your aim statement.

## 8. Defining a Pilot Population

During the Collaborative, your team will test and implement possible system changes with a pilot population, a defined subset of patients. If changes appear to improve care, you can then spread them to the rest of your patients.

## **Diabetes Track**

The pilot population for the diabetes track will be defined as patients of participating healthcare providers who, at the time of registry set-up, had diabetes (types 1 and 2), were aged 18–75, and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area).

The ideal size of a pilot population for a team focusing on diabetes management is 150–200 patients.

### **Adult Preventive Services Track**

The pilot population for the adult preventive services track will be defined as patients of participating healthcare providers who, at the time of registry set-up, were aged 40 and older and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area).

The ideal size of a pilot population for a team focusing on adult preventive services is 200–300 patients. This ideal size is larger than the ideal size for the diabetes track, to increase the likelihood of having at least 50 patients for each measure.

## 9. Selecting and Populating a Registry

## Selecting a Registry

To track the effects of changes on your pilot population, you will need to set up a registry, or tracking system. You may use any registry or system that will cover the measures required by the Collaborative track (diabetes or adult preventive services) you choose.

Two readily available systems are the Adult Preventive Health Services Software (APHS software) and the Chronic Disease Electronic Management System (CDEMS). Both systems contain data and provide reports on patient demographics, visit history, medications, services due, lab results, and all Collaborative measures. Reports can focus on providers, patients, or clinical outcomes. The registries can also generate reminder letters and/or mailing labels. Both are **free** of charge and offer ongoing technical support.

For information about the APHS software contact project manager Andrea Sciaudone, RN, at Qualis Health: **206.364.9700**, ext. **2030**; andreas@qualishealth.org.

For information about CDEMS, contact Kathleen Clark, MS, RD, CDE, at Department of Health, Diabetes Control Program: **360.236.3608**; **kathleen.clark@doh.wa.gov**.

## Populating a Registry

Setting up, or populating, a registry involves abstracting data from patient charts and entering it into the registry. Collaborative faculty will provide guidance and training on these tasks.

If you are focusing on adult preventive services, please contact Collaborative improvement advisor Helan Lee, MPH, at Qualis Health: **206.364.9700**, ext. **2341**; helanl@qualishealth.org.

If you are focusing on diabetes management, please contact Jeanne Harmon, RD, MBA, CDE, at **253.395.6758**.

## 10. Selecting Measures

Measuring performance during the Collaborative will enable your team to evaluate the effects of the changes you test; however, performance measurement is not an end in itself. Measurement should accelerate improvement, not slow it down.

Each team will test and implement changes and monitor progress on both required measures and additional, or optional, measures that are selected by the team. We recommend that teams track **five to seven measures** in all—enough to provide evidence that your team achieved its aim but not so many that you are overwhelmed by the effort required to measure your progress.

Please find a detailed list of required and optional measures in the Measurement Strategy section of this handbook

## 11. Preparing a Storyboard

At each learning session, your team will receive a 30" x 40" foam-core board, pushpins, tape, an easel, and other supplies, so that your team can create a storyboard to present what it has accomplished and learned so far. Storyboards help create an environment conducive to sharing and learning from the experiences of others.

At the first learning session, your storyboard will be a way to introduce your team to the other Collaborative participants. The storyboard is an opportunity to have some fun and show the unique character of your clinic and your team.

The storyboard should be clear and consists of other teams, the

concise. The audience for storyboards Collaborative leadership, observers, and faculty who are not familiar with your

organization, your aim, and your work.

## 12. Partnering with a Health Plan (Optional)

Several health plans participate in the Collaborative by partnering with teams to assist them with their quality improvement efforts and by working to remove barriers to system changes. If you want to partner with a health plan or have questions about this aspect of the Collaborative, contact Collaborative co-director Jan Norman, RD, CDE, at Washington State Department of Health: 360.236.3686.

## 13. Signing an MOU with a Health Plan (Optional)

If you have chosen to partner with a health plan, you will want to meet with staff from the plan to determine what each side of the partnership expects. These expectations should be documented in a signed Memorandum of Understanding (MOU). The MOU will help ensure a successful partnership between you and the health plan.

#### Your Storyboard

Suggested contents for your first storyboard:

- team name, with team members and their titles;
- brief description of your clinic or practice;
- · draft aim statement;
- draft description of your pilot population;
- · draft list of measures;
- any baseline data that you have collected so far; and
- · description of progress so far.

Future storyboards will highlight

- · PDSA cycles,
- your progress on measures,
- · tools you have created, and
- · other learning that might interest other teams.

Bring photos, figures, colored paper, and other creative materials.

We'll provide board, pushpins, and a team sign.

Have fun!

## **Pre-work Activities Worksheet**

The purpose of this worksheet is to facilitate your pre-work and to help you prepare for a conference call with the Collaborative leadership. You are not required to turn in this worksheet.

1.	General Information  Name of clinic or practice
2.	Team Members (Name) (Title) Senior Leader
	System Leader_
	Clinical Champion
	Day-to-Day Leader
	Other Team Members
3.	Working Draft of Aim Statement:
4.	Definition of Pilot Population:
5	Choice of Registry:
<b>J</b> .	enoise of Region y.

## 6. Potential Issues in Setting Up Registry:

Working List of Measures:  Required Measures	
<ul> <li>Diabetes Track</li> <li>Most recent HbA1c &lt; 8.0%</li> <li>Most recent BP &lt; 140/90 mm Hg</li> <li>Most recent LDL &lt; 130 mg/dl</li> <li>Documentation of self-management goal</li> <li>Tobacco-cessation counseling</li> </ul>	<ul> <li>APHS Track</li> <li>Mammogram in the past two years</li> <li>Clinical breast exam in the past year (this measure is required only for BCH contractors and optional for all others)</li> <li>Pap test in the past year (this measure is required only for BCHP contractors and</li> </ul>
	<ul> <li>optional for all others)</li> <li>Pneumococcal vaccination</li> <li>Documentation of self-management goa</li> <li>Tobacco cessation counseling</li> </ul>
Optional Measures	Tobacco cessation counseling

## 6. Potential Issues in Collecting Data on Measures:

## **Collaborative Charter**

The Collaborative charter includes a **mission statement** for the Collaborative, a **problem statement** that describes opportunities to improve preventive care for adults and chronic care for people with diabetes, a **methods** section that describes how the Collaborative works and what models will be used, a section on **expectations**, and **references**.

## **Mission**

The mission of this Collaborative is to improve chronic care for people with diabetes and to improve preventive care for adults through partnership and efficient, evidence-based practices.

## **Problem Statement**

Breast cancer, cervical cancer, colorectal cancer, diabetes, influenza and pneumonia, and tobacco-related illnesses are all leading causes of morbidity and mortality in the United States. The burden of these diseases on the healthcare system and on individuals affected by these diseases is great. Evidence suggests that the use of screening tests and other preventive services can reduce morbidity, mortality, and complications of these conditions. However, preventive services are not always utilized by patients or offered by providers. The following paragraphs describe

- the burden of diseases that are the focus of the *Washington State Collaborative:* Diabetes and Adult Preventive Services,
- services that can help prevent, provide early detection, or manage these diseases, and
- opportunities to improve utilization and delivery of preventive services and of services for managing diabetes.

#### Burden of diseases

Nationwide and in Washington State, the public health burden of breast cancer, cervical cancer, diabetes, influenza and pneumonia, and tobacco-related illnesses are great in terms of morbidity, mortality, cost, and demands on the healthcare system.

#### **Breast cancer**

In the United States, breast cancer is the second leading cause of cancer-related deaths among women.<sup>1</sup> In 2002, the American Cancer Society estimates that there will be about 40,000 deaths from breast cancer nationwide.<sup>1</sup> In Washington State alone, 722 women died of breast cancer in 2000, resulting in an age-adjusted mortality rate of 24.1 per 100,000 women.<sup>2</sup> It is the most commonly diagnosed type of cancer among women in our state.

#### Cervical cancer

The American Cancer Society estimates 13,000 new cases of invasive cervical cancer will be diagnosed in 2002 in the United States, and 4,100 women will die of the disease. In Washington State in 1999, there were 222 new cases. In 2000, there were 61 reported deaths due to cervical cancer.

#### Colorectal cancer

The American Cancer Society estimates that there will be about 107,300 new cases of colon cancer and 41,000 new cases of rectal cancer in 2002 in the United States.<sup>3</sup> Colon cancer will cause about 48,100 deaths and rectal cancer about 8,500 deaths. In Washington State, colorectal cancer is the fourth most common cancer and the second leading cause of cancer deaths.<sup>2</sup> In 1999, 2,911 Washington residents were diagnosed with colorectal cancer and 994 died of this disease. Over 90% of colorectal cancer in Washington State occurs in people older than 50.

### **Diabetes**

In the United States, diabetes ranks as the sixth leading cause of death.<sup>4</sup> Approximately 450,000 people die from diabetes and its complications each year. Furthermore, people with diabetes have a two- to four-fold increase in risk of heart disease and stroke compared to the general population, and diabetes is the leading cause of non-traumatic amputations, blindness, and end-stage renal disease. In Washington State, the prevalence of diabetes among adults is greater than 5%.<sup>2</sup> This percentage translates to more than 210,000 people who are known to have diabetes and another 100,000 people who have diabetes but do not know it.

In most people, diabetes has progressed unmanaged up to 12 years by the time of diagnosis. <sup>5,6</sup> In newly diagnosed cases of diabetes, 15% to 20% have pre-existing retinopathy, 5% to 10% have pre-existing proteinuria, and 50% have tissue damage. <sup>5,7</sup>

#### Influenza and pneumonia

Nationwide, influenza and pneumonia (grouped together) rank as the sixth leading cause of death among older adults aged 65–74, the fifth leading cause among those aged 75–84, and the fourth among those 85 or older.<sup>8</sup> Influenza has been estimated to cause 4.1–4.4 million excess respiratory illnesses and 16.6–17.9 million excess bed days and restricted-activity days annually in Americans older than 20. Influenza and complications account for hundreds of thousands of excess hospitalizations, tens of thousands of excess deaths, and billions of US dollars in healthcare costs each year.<sup>9,10</sup> Pneumococcal disease alone causes about 15,000 deaths and 50,000 cases of bacteremia annually.<sup>11</sup> In Washington State, during the 12-month period ending September 1999, hospitals admitted more than 9,500 Medicare beneficiaries for pneumonia.<sup>12</sup>

#### **Tobacco-related deaths**

Tobacco use has been cited as the chief avoidable cause of illness and death in our society, responsible for more than 430,000 deaths in the United States each year. The American Cancer Society estimates that, in 2002, 170,000 cancer deaths will be attributable to tobacco use. Smoking is a known cause of cancer, chronic obstructive

pulmonary disease, heart disease, pregnancy complications, and stroke.<sup>13</sup> In Washington State in 2000, more than 8,300 deaths were attributable to tobacco use.<sup>14</sup> Paralleling this health toll is the economic burden of tobacco use in the United States: in 1993, medical care for smoking-related conditions cost more than \$50 billion, and the value of lost productivity and forfeited earnings due to smoking-related disability was about \$47 billion per year.<sup>13</sup>

## Recommendations for screening and management

Screening and management recommendations for the targeted diseases are as follows.

#### **Breast cancer**

The United States Preventive Services Task Force (USPSTF) recommends screening mammography every one to two years for women aged 50–69.<sup>15</sup>

The American Cancer Society recommends an annual mammogram, annual clinical breast examination by a healthcare professional, and monthly breast self-examination for all women aged 40 or older.<sup>1</sup>

#### Cervical cancer

The USPSTF recommends screening for cervical cancer with a Papanicolaou (Pap) test at least every three years for all women who are or have been sexually active and who have a cervix <sup>15</sup>

The American Cancer Society generally recommends an annual Pap test for all women who have been sexually active or who are 18 or older.<sup>1</sup>

#### Colorectal cancer

Among the American Cancer Society recommendations for colorectal cancer screening are the following<sup>3</sup>:

Beginning at age 50, men and women should have

- fecal occult blood test (FOBT) every year,
- flexible sigmoidoscopy every five years,
- FOBT every year plus flexible sigmoidoscopy every five years, or
- colonoscopy every ten years.

The USPSTF strongly recommends that clinicians screen men and women 50 and older for colorectal cancer.<sup>16</sup>

#### **Diabetes**

Screening. The American Diabetes Association recommends screening all people aged 45 and older every three years.<sup>17</sup> People with one or more risk factors for diabetes should be screened earlier than age 45. The risk factors include having a family history of diabetes, having known pre-diabetes, having a history of gestational diabetes, giving birth to a

baby over nine pounds or having polycystic ovary disease, being physically inactive, having a BMI ≥ 27, being in a high-risk ethnic group (African American, Asian American/Pacific Islander, Hispanic, or Native American), and having hypertension and hyperlipidemia. The Healthy People 2010 target for diagnosing diabetes is to increase the proportion of adults with diagnosed diabetes from 68% in 2000 to 80% in 2010.

*Management.* The American Diabetes Association recommends the reduction of HbA1c to 7.0%, blood pressure to 130/80 mm Hg, and LDL cholesterol to 100 mg/dl. <sup>19</sup> People with diabetes should receive yearly a neurologic foot exam, kidney evaluation, dilated eye exam, and influenza vaccination. All people with diabetes should receive a pneumococcal vaccination, comprehensive diabetes education, ongoing self-management support, and tobacco-cessation counseling, if appropriate.

#### Influenza

The USPSTF recommends that adults aged 65 and older plus those in high-risk categories receive influenza vaccination annually.<sup>15</sup>

The CDC recommends vaccinating people in the following target populations with influenza vaccine: people at increased risk for complications, people aged 50–64, and people who can transmit influenza to those at high risk.<sup>20</sup> In addition, the CDC provides information regarding vaccination of specific populations.

#### Pneumonia

The USPSTF and the CDC recommend that adults aged 65 or older plus those in high-risk categories receive a pneumococcal vaccination.<sup>15,21</sup>

### **Tobacco-related disease**

The USPSTF recommends tobacco-cessation counseling "on a regular basis" for all people who use tobacco products.<sup>15</sup>

## Opportunities to improve care

Washington State screening rates for preventive services are described below. Low utilization may reflect, in part, low delivery rates.

#### Breast cancer

According to Washington State BRFSS (Behavioral Risk Factor Surveillance System) data,<sup>2</sup> for the years 1998–2000, about 83% of women aged 40–49 reported ever having had a mammogram. About 66% of those had had a mammogram in the past two years. Among women aged 50 and older, 98% reported ever having had a mammogram; 78% reported having one in the past two years. Screening rates may be lower among some populations because telephone surveys may result in inflated screening rates and smaller observed disparities.

#### Cervical cancer

Also according to Washington State BRFSS data,<sup>2</sup> rates of Pap tests differ among age ranges, education levels, and incomes. Screening rates for older women tend to be lower than for other age groups: among women who were surveyed from 1998–2000 and who did not have a hysterectomy, about 74% of aged 65 and older reported receiving a Pap test in the past three years compared to about 88% of women aged 18–64. Screening rates were also associated with socioeconomic factors: the data suggest that about 80% of women aged 18 and older with less than a high school education had a Pap test in the past three years compared to about 87% of women with a high school diploma or more education. Among women with annual household incomes of \$20,000 or less, about 79% reported having a Pap test in the past three years compared to almost 89% of women with higher annual income.

#### Colorectal cancer

According to the 1999 Washington State BRFSS data,  $^{22}$  only 35% ( $\pm$  3%) of people aged 50 and older received this test in the past two years. Fifty-one percent ( $\pm$  3%) of people aged 50 and older reported ever having a sigmoidoscopy or a colonoscopy. Overall, fewer than 40% of people in Washington who were older than 50 were up-to-date on their colorectal cancer screening.

#### **Diabetes**

*Opportunity to improve screening.* No data are available on the rate at which people are screened for diabetes; however, in Washington State, over 100,000 people are estimated to have undiagnosed diabetes.<sup>2</sup>

Opportunity to improve management. In comparison to people without diabetes, people with diabetes have greater prevalence of cardiovascular disease, renal disease, peripheral vascular disease, and neurological disease. These medical conditions require more complex medical supervision but are preventable if blood sugar, blood pressure, and lipids are controlled.<sup>23,24</sup> Hospitalizations driven by these preventable complications can be decreased through efforts to deliver prevention focused population-based care.

The major disabilities caused by diabetes are

- blindness: diabetes is the leading cause of adult blindness in the United States. Based on data from the Massachusetts blindness registry, it is estimated that one person in Washington State goes blind each day because of diabetes.<sup>25</sup>
- coronary heart disease and stroke: damage to large blood vessels leads to a two to four-fold increase in coronary heart disease<sup>26</sup> and stroke over that of the general population.<sup>27</sup>
- amputations: based on Washington hospitalization data, each day ten people with diabetes in our state suffer an amputation.<sup>2</sup>

 kidney disease: based on data from the Northwest Renal Network, it is estimated that, in Washington State, one new person each day begins dialysis because of diabetes.<sup>28</sup>

## Influenza and pneumonia

BRFSS data from 1999 indicate that there is room for improvement in administering immunizations for influenza and pneumonia.<sup>22</sup> In the United States, 31.3% of those surveyed (aged 18 and older) reported receiving an influenza vaccination in the past year, and 18.4% reported ever receiving a pneumococcal vaccination. Rates in Washington State, also from BRFSS data, are 34.5% for influenza vaccination and 18.4% for pneumococcal vaccination.

#### **Tobacco-related disease**

In the United States, the percentage of adults currently smoking is 23.3%, or 46.5 million people.<sup>22</sup> In Washington State, 20.7% of the adult population is currently smoking (1 million people).<sup>22</sup> According to BRFSS data, about 47% of smokers have been advised by a health professional during the past year to quit.<sup>22</sup>

## Delivery rates may be low

Low utilization rates may reflect, in part, low delivery rates. Kottke and others<sup>29</sup> found that patients who visited their clinic for a checkup or physical were prescribed appropriate preventive services (including blood pressure and cholesterol measurement, smoking-cessation counseling, clinical breast exam, screening mammography, Pap test, and influenza and pneumococcal vaccinations) only about 46% of the time. Similarly, a study by Ramsey and others<sup>30</sup> showed that patient characteristics were less important than clinic characteristics in predicting whether patients received preventive services. Such studies reinforce the need to improve upon the delivery and organization of recommended preventive services in primary care settings.<sup>15,31</sup>

## **Methods**

As described in the Getting Started section, the major events of the Collaboratives are learning sessions and the outcomes congress. The times between these events are called "action periods."

During action periods, your team will use the Model for Improvement and the Chronic Care Model to re-design and improve your office practices. The Model for Improvement is a strategy for testing, implementing, and spreading practice innovations. It includes use of plan-do-study-act (PDSA) cycles, or rapid-cycle improvement. The Chronic Care Model is a picture and description of an ideal system of healthcare for chronic conditions. Consisting of six essential components, the model can also be applied to preventive health.<sup>32</sup> Both of the Model for Improvement and the Chronic Care Model will be covered in detail at the first learning session.

Throughout the Collaborative you will interact with other teams and with the Collaborative leadership through learning sessions, an electronic mailing list (e-mail list),

teleconferences, site visits, a Web site for the Collaborative, sharing of reports, and the outcomes congress. During action periods, the e-mail list, in particular, will be helpful for sharing tools and lessons learned, obtaining answers to your questions, generating ideas for removing barriers, and identifying resources.

Once per month, you will assess your progress and create a senior leader report. The purpose of the report is to summarize your progress and identify barriers to improvement. The audience for the report is your senior leader, the Collaborative leadership, and other teams. The report generally includes a summary of what you have done and your results, displayed as annotated run charts. A template for senior leader reports and a tool for creating annotated run charts will be provided at the first learning session.

## **Expectations**

## The Collaborative leadership and faculty will

- provide information on subject matter, application of the subject matter, and methods for process improvement, both during and between learning sessions;
- offer coaching to teams;
- provide an electronic mailing list (e-mail list) and other communication venues for shared learning;
- provide summary information on the status of teams;
- assess progress and provide feedback to teams monthly;
- plan and implement the learning sessions and outcomes congress;
- maintain and safeguard the confidentiality of privileged data or information—whether written, photographed, or electronically recorded and whether generated or acquired by the team—which can be used to identify an individual patient, practitioner, hospital, facility, health plan, or patient population.

## **Teams** are expected to

- perform pre-work activities as outlined in this handbook;
- connect the goals of the Collaborative work to a strategic initiative in their organization;
- provide a senior leader to sponsor and actively support the team;
- provide the resources to support the team, including resources necessary for learning sessions and staff time to devote to this effort;
- participate in each learning session (participation by all core team members is highly recommended, and participation in the congress that concludes the Collaborative is desirable):
- define the measures that the team will target;

- maintain a registry;
- plan, design, and implement plan-do-study-act (PDSA) improvement cycles to meet the team's aim;
- submit monthly reports to the team's senior leader and to the e-mail list;
- create storyboards for presentation at each learning session;
- share information with the Collaborative, including details of changes made and data to support these changes, both during and between learning sessions;
- maintain and safeguard the confidentiality of privileged data or information—whether written, photographed, or electronically recorded and whether generated or acquired by the team—which can be used to identify an individual patient, practitioner, hospital, facility, health plan, or patient population.

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# **Measurement Strategy**

## **Diabetes Track**

The pilot population for the diabetes track will be defined as patients of participating healthcare providers who, at the time of registry set-up, had diabetes (types 1 and 2), were aged 18–75, and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area). The following table lists and defines required, optional, and balancing measures for teams focusing on diabetes. Teams may also develop new measures based on the issues that are of most interest or importance to their organization.

Measure	Statistic*	Typical Value†	WA DOH Goal‡
Required measures—the percentage of patients with:			
Most recent HbA1c < 8.0%	<ul> <li>Numerator: # of patients with the most recent (within the past year) HbA1c &lt; 8.0%</li> <li>Denominator: # of patients in the pilot population</li> </ul>	58%	75%
Most recent BP < 140/90 mm Hg	<ul> <li>Numerator: # of patients with most recent (within the past year) blood pressure &lt; 140/90 mm Hg</li> <li>Denominator: # of patients in the pilot population</li> </ul>	64%	75%
Most recent LDL < 130 mg/dl	<ul> <li>Numerator: # of patients with the most recent (within the past year) LDL &lt; 130 mg/dl</li> <li>Denominator: # of patients in the pilot population</li> </ul>	70%	85%
Documentation of self- management goal	<ul> <li>Numerator: # of patients with a documented self-management goal in the past year</li> <li>Denominator: # of patients in the pilot population</li> </ul>	< 20%	> 70%
Tobacco-cessation counseling	<ul> <li>Numerator: # of patients who have been offered tobacco-cessation counseling in the past year</li> <li>Denominator: # of patients in the pilot population who use tobacco</li> </ul>	< 50%	> 90%
Optional measures—the percentage of patients with:			
Two HbA1c tests	Numerator: # of patients with documentation of two tests at least three months apart in the past year     Denominator: # of patients in the pilot population	not available	not available
ACE inhibitors	<ul> <li>Numerator: # of patients with a current prescription for ACE inhibitors</li> <li>Denominator: # of patients in the pilot population aged 55 and older</li> </ul>	not available	not available
BP < 130/80 mm Hg	<ul> <li>Numerator: # of patients with most recent (within the past year) blood pressure &lt; 130/80 mm Hg</li> <li>Denominator: # of patients in the pilot population</li> </ul>	not available	not available
Average HbA1c	Average value (using most recent value) for patients in the pilot population with at least one HbA1c reading in the past year	> 9.0	< 8.0

* Numerator divided by deno	minator, then multiplied by 100, gives you the percent of pati	ents meeting the	measure
Total medical costs per patient	Median medical cost for pilot population for past year	not available	not available
Specialty visits	Average number of visits per patient in population	not available	not available
Primary care visits	Average number of visits per patient in population	not available	not available
Pharmaceutical costs	Average annual cost per patient in population	not available	not available
Patient or provider satisfaction with care	Average satisfaction rating or percentage of high rating on a survey	not available	not available
Inpatient days	Total inpatient days per 100 patients in population	not available	not available
Access	Average waiting time	not available	not available
Balancing measuresoption measures that track unintend consequences of improvement	ded ent efforts		
Depression solectiling	Numerator: # or patients with documentation or a depression screening in the past year     Denominator: # of patients in the pilot population	not available	not available
Depression screening	<ul> <li>Denominator: # of patients in the pilot population</li> <li>Numerator: # of patients with documentation of a</li> </ul>		
Dental exam	Numerator: # of patients with documentation of a dental exam in the past year	not available	not available
	<ul> <li>contraindication (not necessarily in the past year)</li> <li>Denominator: # of patients in the pilot population aged 65 and older or otherwise at high risk</li> </ul>	33%	48%
Pneumococcal vaccination	Numerator: # of patients with documentation of a pneumococcal vaccination, a refusal, or a		
	<ul><li>in the past year</li><li>Denominator: # of patients in the pilot population</li></ul>	28%	65%
Influenza vaccination	Numerator: # of patients with documentation of an influenza vaccination, a refusal, or a contraindication	2521	
	<ul> <li>screening in the past year</li> <li>Denominator: # of patients in the pilot population with normal creatinine and no nephropathy</li> </ul>	42%	> 50%
Microalbumin screening	Numerator: # of patients with results from or recommendation for (team's choice) a microalbumin paragraphic in the past year.		
	Denominator: # of patients in the pilot population	< 30%	> 90%
Neurosensory foot exam in the past year	Numerator: # of patients with documentation of a foot exam in the past year	200/	> 000/
	dilated eye exam in the past year  • Denominator: # of patients in the pilot population	< 30%	> 70%
Dilated eye exam	Numerator: # of patients with results from or with a documented recommendation for (team's choice) a		
Daily aspirin use	<ul> <li>Numerator: # of patients who report using aspirin daily</li> <li>Denominator: # of patients in the pilot population aged 30 and older</li> </ul>	< 50%	> 80%
	Denominator: # of patients in the pilot population		
LDL < 100 mg/di	past year) LDL < 100 mg/dl	38%	50%
LDL < 100 mg/dl	Numerator: # of patients with most recent (within the		

<sup>\*</sup> Numerator divided by denominator, then multiplied by 100, gives you the percent of patients meeting the measure requirements.

<sup>†</sup> Typical values are what teams might expect to find as they begin abstracting data from patient charts. These typical values are estimated based on our past experiences with diabetes Collaboratives.

<sup>‡</sup>The Diabetes Control Program at the Washington State Department of Health puts forth these goals. Teams can consider them when developing their aim statements.

## **Adult Preventive Services Track**

The pilot population for the adult preventive services track will be defined as patients of participating healthcare providers who, at the time of registry set-up, were aged 40 and older and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area). The following table lists and defines required, optional, and balancing measures for teams on the diabetes track. Teams may also develop new measures based on the issues that are of most interest or importance to their organization.

Measure	Statistic*		
Required measures—the percentage of patients in the pilot population with:			
Mammogram in the past two years	Numerator: # of patients with results from a mammogram in the past two years		
	<ul> <li>Denominator: # of women in the pilot population, excluding only those for whom mammography would be inappropriate (e.g., women who have had a double mastectomy)</li> </ul>		
Clinical breast exam in the past year (this measure is required only for BCHP contractors and optional for all	Numerator: # of patients with documentation of a clinical breast exam in the past year		
others)	Denominator: # of women in the pilot population		
Pap test in the past year (this measure is required only for BCHP contractors and optional for all others)	Numerator: # of patients with results from a Pap test in the past year		
	<ul> <li>Denominator: # of women in the pilot population, excluding only those for whom a Pap test would be inappropriate (e.g., women who have had a hysterectomy)</li> </ul>		
Pneumococcal vaccination	<ul> <li>Numerator: # of patients with documentation of a pneumococcal vaccination, a refusal, or a contraindication (not necessarily in the past year)</li> </ul>		
	<ul> <li>Denominator: # of patients in the pilot population aged 65 and older or otherwise at high risk</li> </ul>		
Self-management goal	Numerator: # of patients with a documented self- management goal		
	Denominator: # of patients in the pilot population		
Tobacco-cessation counseling	Numerator: # of patients who have been offered tobacco- cessation counseling in the past year		
	<ul> <li>Denominator: # of patients in the pilot population who use tobacco</li> </ul>		
Optional measures—the percentage of patients with:			
Clinical breast exam in the past year (this measure is required only for BCHP contractors and optional for all	Numerator: # of patients with documentation of a clinical breast exam in the past year		
others)	Denominator: # of women in the pilot population		
Pap test (this measure is required only for BCHP contractors and optional for all others)	Numerator: # of patients with results from a Pap test in the past year		
	Denominator: # of women in the pilot population		

## Measurement Strategy

Total medical costs per patient

Colorectal cancer screening	<ul> <li>Numerator: # of patients with recommendation for colorectal cancer screening in the past two years</li> <li>Denominator: # of patients in the pilot population aged 50 and older</li> </ul>		
Diabetes screening	<ul> <li>Numerator: # of patients screened for diabetes in the past three years</li> <li>Denominator: # of patients in the pilot population aged 45 or older or otherwise at high risk</li> </ul>		
Dyslipidemia screening	<ul> <li>Numerator: # of patients screened for dyslipidemia in the past three years</li> </ul>		
	<ul> <li>Denominator: # of patients in the pilot population aged 45 and older or otherwise at high risk</li> </ul>		
Influenza vaccination	Numerator: # of patients with documentation of an influenza vaccination, a refusal, or a contraindication in the past year		
	Denominator: # of patients in the pilot population		
<b>Balancing</b> measuresoptional measures that track unintended consequences of improvement efforts			
Access	Average waiting time		
Inpatient days	Total inpatient days per 100 patients in population		
Patient or provider satisfaction with care	Average satisfaction rating or percentage of high rating on a survey		
Pharmaceutical costs	Average annual cost per patient in population		
Primary care visits	Average number of visits per patient in population		
Specialty visits			

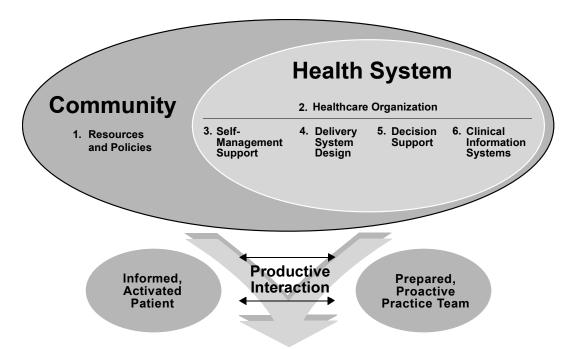
<sup>\*</sup> Numerator divided by denominator, then multiplied by 100, gives you the percent of patients meeting the measure requirements.

Median medical cost for pilot population for past year

# **Change Package**

Both Collaborative tracks will use the Chronic Care Model, which will be explained at the first learning session, as the framework for re-designing care.

## **Chronic Care Model**



**Functional and Clinical Outcomes** 

#### **Community Resources and Policies**

- Effective programs are identified and patients are encouraged to participate.
- Partnerships with community organizations are formed to develop evidence-based programs and health policies that support chronic and preventive care.
- Health plans coordinate guidelines, measures, and care resources throughout the community.

#### **Healthcare Organization**

- Goals for chronic illnesses and preventive care are a measurable part of the organization's annual business plan.
- Health plans design benefits that promote chronic illness management and preventive care.
- Organizations design incentives for providers to improve chronic illness management and preventive care.

#### Change Package

- The organization uses proven improvement strategies to achieve comprehensive system change.
- Senior leaders visibly support improvement in chronic illness management and preventive care.

#### **Self-Management Support**

- Providers emphasize the patient's active and central role in managing and preventing illness.
- Standardized patient assessments include self-management knowledge, skills, confidence, supports, and barriers.
- Effective behavior-change interventions and ongoing support with peers or professionals are provided.
- The care team collaborates with the patient in care planning and problem-solving.

#### **Decision Support**

- Evidence-based guidelines are embedded in daily practice.
- Specialist expertise is integrated into primary care.
- Providers are educated using modalities proven to change practice behavior.
- Patients are informed of clinical guidelines pertinent to their care.

#### **Delivery System Design**

- Roles are defined and tasks delegated.
- Planned visits are used to provide care.
- The care team provides continuity of care.
- The system ensures that patients receive regular follow-up.

#### **Clinical Information Systems**

- There is a registry with clinically useful and up-to-date information.
- Care reminders and feedback for providers and patients are built into the information system.
- Relevant patient subgroups can be identified for proactive care.
- The information system facilitates care-planning for individual patients.

## **Key Changes for Diabetes Management**

Teams should test and implement changes that fit under the various components of the Chronic Care Model.

Standards of Care	Key Changes			
Identify the population of people with diabetes and proactively manage diabetes.	<ul> <li>Routinely review the registry and follow-up with patients.</li> <li>Have office staff make follow-up phone calls.</li> <li>Initiate scheduling of office visits with patients in need of routine screening.</li> <li>Work collaboratively with patients to set goals.</li> <li>Develop a comprehensive program for supporting self-management.</li> <li>Develop, distribute, and integrate evidence-based guidelines throughout the health system.</li> </ul>			
Reduce the risk of cardiovascular complications.	<ul> <li>Document and track the tobacco habits of patients.</li> <li>Offer tobacco-cessation courses, and document responses.</li> <li>Link patients with tobacco-cessation support groups.</li> <li>Establish evidence-based guidelines for aspirin use.</li> <li>Offer weight loss programs and exercise programs; foster community links.</li> <li>Implement a system for blood pressure documentation and tracking with protocols.</li> </ul>			
Reduce risk of microvascular complications.	<ul> <li>Establish retina-screening protocols for patients with type 1 or type 2 diabetes.</li> <li>Implement an office tracking system, reminder system, and office-initiated notification system for patients in need of eye examinations.</li> <li>Develop community-based financial support mechanisms to assist patients with the cost of eye exams.</li> <li>Establish a protocol for renal screening.</li> <li>Create a tracking mechanism for monitoring microalbuminuria in patients with diabetes.</li> <li>Establish a protocol for the administration and tracking of medications for hypertension (i.e., ACE inhibitors).</li> <li>Establish a protocol and procedure for foot exams.</li> <li>Create an intervention program which advocates regular foot exams for all patients with diabetes and protective foot care behaviors for patients with high-risk feet.</li> <li>Establish a reminder system for office-initiated patient notification of annual foot exams.</li> </ul>			
Manage blood sugar.	<ul> <li>Create a system for tracking HbA1c levels.</li> <li>Establish a protocol for routine HbA1c measurements.</li> <li>Design a system for collaboratively planning to control blood sugar.</li> <li>Establish a clear plan of care for the patient and the provider, setting and maintaining a target for HbA1c levels.</li> </ul>			
Integrate self-management responsibilities into the patient's care plan.	Schedule a documented encounter at least annually to promote patient identification of self-management opportunities.     Offer regular follow-up support and educational materials.			

## **Key Changes for Adult Preventive Services**

Teams should test and implement changes that fit under the various components of the Chronic Care Model.

#### Standards of Care

#### **Breast Cancer**

Recommend mammograms at intervals appropriate for the patient's age and identified risks.

Make sure patients receive the results of mammograms.

#### Cervical Cancer

Recommend Pap tests at intervals appropriate for patient's age and identified risks.

Make sure patients receive results of Pap tests.

#### Colon Cancer

Recommend screening at intervals appropriate for the patient's age and identified risks.

Make sure patients receive results of screening.

#### Diabetes

Screen patients at high risk for diabetes every three years.

Evaluate and treat patients with diagnostic screening results.

#### Influenza and Pneumonia

Screen all patients for vaccination status at each outpatient visit.

Maintain records of vaccination for all patients.

Administer pneumococcal vaccine to all eligible adults using CDC guidelines.

Administer influenza vaccine during the influenza season (September through March) to all patients according to CDC guidelines.

Vaccinate patients classified as high-risk for complications from influenza early in the influenza season.

In the event of a shortage of influenza vaccine, make sure patients classified as high-risk for influenza receive priority.

Remind patients to get influenza and pneumococcal vaccinations.

#### Tobacco Use

Identify every current and former tobacco user at every visit.

At every visit, assess and document the willingness of current tobacco users to make a quit attempt.

#### **Key Changes for All Topics**

#### Community Resources and Policies

- Establish lists of community resources for patients (e.g., list of mammography facilities, list of social support programs, lists of vaccination clinics, Quit Line number).
- Set up partnerships with other healthcare professionals (e.g., pharmacists, optometrists, mammography facilities, drug companies).
- Seek community resources for minimizing financial barriers.
- Promote free or low-cost screening or vaccination clinics.
- · Participate in community fairs or host health fairs.

#### Healthcare Organization

- Make prevention part of your organization's strategic goal.
- Send positive reinforcement and incentives (e.g., letter, gift certificate, healthy food, newsletter publicity, letter to supervisor) to staff who achieve quality improvement goals.
- Use your organization's quality improvement efforts for public relations and social marketing.

#### Self-Management Support

- · Offer clinical interventions to tobacco users.
- Provide practical counseling (e.g., problem-solving skills, nutrition counseling, exercise counseling).
- Give patients information on the importance of preventive care.
- Provide incentives for patients to achieve selfmanagement goals.
- Place informational posters and brochures in waiting and exam rooms.
- Provide patients with wallet cards for preventive care and vaccination history.

#### Delivery System Design

- Schedule recommended tests and screenings for patients at the time of the office visit and recommendation.
- · Use flow sheets.
- Dedicate staff to provide treatment for tobacco dependence.
- Implement standing orders for preventive tests and vaccinations.
- Screen patients for vaccinations and preventive services due at each outpatient visit.
- · Hold vaccination and screening clinics.
- Have a case manager follow up with patients with abnormal results.



Provide brief clinical intervention to every patient who uses tobacco; use the "5As"—ask about tobacco use, advise to quit, assess willingness to make a quit attempt, assist in quit attempt, and arrange follow-up—and document this intervention.

Offer pharmacotherapy to every patient who uses tobacco unless they have contraindications.

Provide the number for the Washington Quit Line or provide local tobacco-cessation counseling to every patient who uses tobacco.

Intervene with tobacco users who are unwilling to try to quit using the "5 Rs": relevance, risks, rewards, roadblocks, and repetition.

- Use appointment cards with referral place, time, date, and consent to send results to PCP.
- Convene monthly staff meetings to review improvements and barriers to care delivery.
- · Consider changes to hours of service.
- Convene regular team meetings to coordinate care.
- · Consider doing home visits.
- · Hold group visits.
- · Design planned visits.
- Include physician extenders such as ARNPs, PA-Cs, and other staff in quality improvement efforts.
- Identify risk factors that designate frequency of screening.

#### Clinical Information Systems

- Provide feedback on clinical management decisions for peer comparisons.
- Use provider reminders such as chart stickers, checklists, forms, policies, procedures, protocols, and critical pathways.
- Use registry to identify all high-risk patients and/or patients overdue for services.
- Remind patients of services and vaccinations due (phone calls are most effective).

#### Decision Support

- Increase access to specialty care via guest lecture for staff.
- Distribute guidelines, articles, etc., to healthcare providers.
- · Identify physician champions.
- Provide academic detailing on quality improvement efforts.
- Provide cultural competency training for providers.
- Improve communication between providers and educators.

## Glossary of Terms and Concepts

## action period

The time between learning sessions when teams work on improvement in their organizations. They are supported by the Collaborative leadership team and faculty and other Collaborative team members via an e-mail list, a Web site, monthly teleconferences, and site visits.

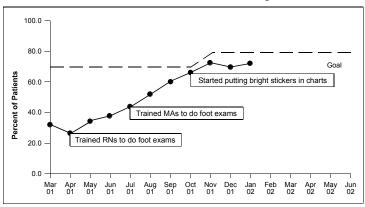
#### aim, or aim statement

A written, measurable, and time-sensitive statement of the accomplishments a team expects to make from its improvement efforts. The aim statement contains a general description of the work, the pilot population, and the numerical goals.

#### annotated run chart, or annotated time series

A line graph showing results of improvement efforts plotted over time. Implemented changes and other relevant information are noted on the line chart, allowing the viewer to connect changes and events with specific results. Example:

## Patients with Annual Neurosensory Foot Exam



#### assessment scale

A numerical scale used to assess the progress of participating teams toward reaching their aim: 1 = forming team, and 5 = outstanding, sustainable improvement. In each Collaborative, faculty assess teams and also ask them to evaluate their own progress using this scale. The expected level of attainment by the end of the Collaborative is a 4 (significant progress).

#### balancing measures

Optional measures that track unintended consequences of improvement efforts.

#### chair

The leader of the Collaborative, usually an expert in the topic.

## champion

An individual in the organization who believes strongly in quality improvement and is willing to work with others to test, implement, and spread changes. Teams need at least one clinical champion. Champions in other disciplines who work on the process are important as well.

### change concept

A general idea for changing a process, usually developed by an expert panel based on literature and practical application of evidence. Change concepts are usually at a high level of abstraction, but evoke multiple specific ideas for how to change processes. "Simplify," "reduce handoffs," and "consider all parties as part of the same system," are all examples of change concepts.

### change idea

An actionable, specific idea for changing a process. Change ideas can be tested to determine whether they result in improvements in the local environment. An example of a change idea is, "Simplify process for data entry by having front desk staff enter visit information daily from a duplicate copy while the original is filed in the chart."

#### change package

A collection of change concepts and key changes.

#### **Chronic Care Model**

A model that represents the ideal system of healthcare for people with chronic disease and an approach to re-designing healthcare to mirror that ideal system. Developed by Improving Chronic Illness Care, the model has six components: community resources and policies, healthcare organization, self-management support, decision support, delivery system design, and clinical information systems. This Collaborative will apply the model to preventive care as well as to management of chronic disease.

#### Collaborative

A systematic approach to healthcare quality improvement in which organizations and providers test and measure practice innovations, then share their experiences in an effort to accelerate learning and widespread implementation of best practices. Everyone teaches, everyone learns.

## Collaborative leadership and faculty

The small group of experts on the topic who assist the chair and director in developing the Collaborative and in teaching and coaching participating teams. The Collaborative leadership and other faculty members generally represent the spectrum of healthcare professionals involved in the change process.

#### Collaborative team

All individuals from the participating organizations that drive and participate in the improvement process. A core team of three to four individuals attends the learning

sessions, but a larger team of three to six people, often from various disciplines, participates in the improvement process in the organization.

#### coordinator

Staff person responsible for the day-to-day activities of the Collaborative, including scheduling conference calls, collecting and disseminating materials, receiving and tracking monthly reports, and managing the e-mail list.

#### core team members

The individuals who attend the learning session and fulfill the roles of senior leader, system leader, clinical champion, and day-to-day leader.

#### cycle

See "PDSA cycle."

#### data collection plan

A specific description of the data to be collected, the interval of data collection, and the subjects from whom the data will be collected. The plan is included in all senior leader reports. It emphasizes the importance of gathering samples of data to obtain "just enough" information.

## day-to-day leader

The person on the team who is responsible for driving the improvement process every day. This person manages the team, arranges meetings, and assures that tests are being completed and that data are collected. This role usually requires 0.25 FTE or more.

## director

The manager of a Collaborative who works with the faculty, teaches and coaches teams, and plans and executes activities at learning sessions and during action periods.

#### early adopter

In the improvement process, the opinion leader within the organization who brings in new ideas from the outside, tries them, and uses positive results to persuade others in the organization to adopt the successful changes.

## early majority and late majority

The individuals in the organization who will adopt a change only after it is tested by an early adopter (early majority) or after the majority of the organization is already using the change (late majority).

#### electronic mailing list, or e-mail list

A communication system that allows teams to stay connected with the leadership team and each other during the action periods. Sharing information, getting questions answered, and solving problems are all part of e-mail list activity.

#### handbook

Pages containing a complete description of the Collaborative, along with what to expect and activities to complete before the first meeting of the Collaborative.

### implementation

Taking a change and making it a permanent part of the system. A change may be tested first and then implemented throughout the organization.

## improvement advisor

The expert in process improvement and measurement who assists the chair and director in guiding the Collaborative's work and coaching teams.

## improvement cycle

See "PDSA cycle."

#### IS

Refers to the information system of an organization, which is usually the computerized information system.

#### key change, or process change

A change in a system or process in an organization that may lead to breakthrough improvement. Key changes are more focused and detailed than change concepts, but they are not specific to the local environment like change ideas. An example of a key change is, "Enter data into registry regularly."

#### late majority and early majority

See "early majority and late majority."

#### learning session

A two-day meeting during which team members and faculty meet to learn what key changes are and to learn how to test and implement them, accelerate improvement, and overcome obstacles. Teams leave these meetings with new knowledge, skills, and materials that prepare them to make immediate changes.

#### measure

A focused, reportable, unit that will help a team monitor its progress toward achieving its aim.

## **Model for Improvement**

An approach to process improvement, developed by Associates in Process Improvement, that helps teams accelerate the adoption of proven and effective changes. The model includes use of "rapid-cycle improvement," successive cycles of planning, doing, studying, and acting (PDSA cycles).

#### outcomes congress

A large public meeting at the end of the Collaborative during which the best practices in the topic area are presented to others interested in making improvements.

### PDSA cycle

A structured trial of a process change. Drawn from the Shewhart cycle, this effort includes the following steps:

```
plan—a specific planning phase;
do—a time to try the change and observe what happens;
study—sometimes called "check," an analysis of the results of the trial; and
act—devising next steps based on the analysis.
```

This PDSA cycle will naturally lead to the "plan" component of a subsequent cycle. PDSA cycles are also called rapid cycles or improvement cycles.

#### pilot population, or population of focus

A designated set of patients who will be tracked to determine whether changes have resulted in improvements. For this Collaborative, the pilot population will generally consist of (1) patients of participating healthcare providers who, at the time of registry set-up, had diabetes (types 1 and 2), were aged 18–75, and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area) or (2) patients of participating healthcare providers who, at the time of registry set-up, were aged 40 and older and had at least one visit to the clinic within the past year (unless there is documentation that the patient has transferred to another clinic or has moved from the area). The ideal size of a pilot population for a team on the diabetes track is 150–200 patients. The ideal size of a pilot population on the adult preventive services track is 200–300 patients.

#### pilot site

The clinic location where changes are tested. After implementation and refinement, the changes will be spread to additional locations.

#### population of focus

See "pilot population."

## pre-work

The time before the first learning session when teams prepare for their work in the Collaborative. Pre-work activities include forming a team, registering for the first learning session, scheduling initial meetings, preparing an aim statement, defining a pilot population, selecting measures, and populating a registry.

#### process change

See "key change."

#### rapid cycle

See "PDSA cycle."

#### run chart

See "annotated run chart."

#### senior leader

The executive in the organization who supports the team and controls the resources employed in the processes to be changed. The senior leader works to connect the team's aim to the organization's mission, provides resources for the team, and promotes the spread of the team's work to other populations.

## senior leader report

The standard format for reporting monthly progress during the Collaborative. This concise report (usually about two pages) includes an aim statement, measures to be used, a data collection plan, a listing of the changes made, the results displayed as run charts, and a self-assessment score. The team prepares the report and sends it to the senior leader at the organization, in addition to posting it to the e-mail list. The Collaborative leadership reviews the reports and prepares a summary of all senior leader reports.

#### spread

The intentional and methodical expansion of the number and type of people, units, or organizations using the improvements. The theory and application of spread comes from the literature on the concept of Diffusion of Innovation.

## storyboard

A 30" x 40" foam-core board that displays information about a team and its progress and that is displayed at learning sessions to help create an environment conducive to sharing and learning from the experiences of others. For more information, see the Completing Pre-work section.

#### system leader

The core team member who has direct authority to allocate the time and resources to achieve the team's aim, has direct authority over the particular systems affected by the change, and will champion the spread of successful changes throughout the department or service area. The system leader attends all three learning sessions and the outcomes congress.

#### technical expert

The team member in the organization who has a strong understanding of the process to be improved and changes to be made. A technical expert may also provide expertise in process improvement, data collection and analysis, and team function.

## test

A small-scale trial of a new approach or a new process. A test is designed to learn whether the change results in improvement or to fine-tune the change to fit the organization and patients. Tests are carried out using PDSA cycles.

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